Fuzzy Simulated Evolution Algorithm For Multi-Objectiveoptimization Of VLSI Placement

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Summary

A fuzzy simulated evolution algorithm is presented for multi-objective minimization of VLSI cell placement problem. We propose a fuzzy goal-based search strategy combined with a fuzzy allocation scheme. The allocation scheme tries to minimize multiple objectives and adds controlled randomness as opposed to original deterministic allocation schemes. Experiments with benchmark tests demonstrate a noticeable improvement in solution quality